



Publication Date: 19<sup>th</sup> January 2001

## **The Roll Out and Methodology of the Depository Review and Risk Evaluation Service (“Depository Service”)**

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### **Introduction**

The Depository Service is an annual programme, which will formally analyse equity and fixed income Central Securities Depositories (“CSDs”) around the world. The Depository Service is an inclusive and industry neutral initiative open to all interested parties. It provides an industry solution to respond to commercial pressures to assess depositories, and to the U.S. Securities and Exchange Commission’s new Rule 17f-7. It does this through the local collection and validation of data, the evaluation and analysis of the related risks, and the publication and sharing of the results.

The Depository Service is being managed and led by Thomas Murray in London with the depository risk assessments provided by Standard & Poor’s (“S&P”). The Service represents a milestone in cross-industry co-operation. It combines Thomas Murray’s strong position as a provider of research, evaluation and assessment of global custodians, agent banks and CSDs with S&P’s extensive analytical resources and experience in evaluating risk, plus draws further on the expertise contributed by the industry and other third parties. The Depository Service is being supported by a core group of leading banking groups who have contracted to act as data collection and validation banks globally. These banks include but are not limited to:

ABN AMRO	Bank of New York
BNP Paribas	Citibank
State Street	Mellon Trust
HSBC (Information Validation Bank)	

An Advisory Group oversees the governance of the Depository Service. This is an industry representative group created to maintain neutrality and to assist in the development and oversight of the structure and content of the Service. The Advisory Group has met several times over the past year and is comprised of senior representatives from Thomas Murray, S&P, ABN AMRO, Bank of New York, BNP Paribas, Citibank, Goldman Sachs, IFC/World Bank, Mellon Trust, Merrill Lynch, and State Street.

There is also a Working Group, comprised of global market and risk specialists from entities participating in the Advisory Group. The Working Group has met regularly over the second half of 2000 to define and draft the risk criteria against which each depository will be assessed. The Group prepared a data collection workbook (“Workbook”) to be used as part of the data collection phase to support the operational and risk analysis.

### **Rationale behind the launch of the Depository Service**

As mentioned above, the Service was developed in response to a general increase in institutional investor demand for risk information regarding depository systems and in response to the U.S. Securities and Exchange Commission Rule 17f-7 that came into effect in mid-2000. Rule 17f-7 requires US mutual fund managers, whenever they make an investment decision, to take into consideration the safety of underlying assets during the settlement process and in on-going safe custody. Fund managers are not best placed to obtain the necessary data required to make an analysis of risks. Custodians for mutual funds are therefore required to make analysis of the custody risk associated with utilising depositories available to their clients.

Building on the existing CSD research platform and publications (i.e., CSD Guides 1997 & 1999) Thomas Murray have been encouraged to launch the Depository Service to help meet these existing and growing requirements. Thomas Murray’s response has been to organise the collection, validation and review of Depository and associated data. The Service will evaluate the structural and operational effectiveness of CSDs and related risks associated with local market settlement and custody.

### **Depository Service Scope**

Depositories exist in most securities markets and act as a facility for holding equity and/or debt instruments (“storage”), which enable securities transactions to be processed by book entry. A Depository safeguards and records securities either physically or electronically and may record ownership of these securities.

- The scope of the Depository Service is to look at entities providing “storage only” or “storage and flow”, but never “flow only”, a function usually provided by Clearing Houses.
- The Depository Service understands that depository risks are on occasion inseparable from risks in the local marketplace and that it would be misleading to contain analysis in all cases to risks emanating only from the depository itself. As warranted by circumstances, therefore, the Service scope will not exclude consideration of exposures that may originate in market practices or other local infrastructures essential to a depository’s functions. In this regard, some of the issues raised by the assessment may not be issues under the control of the Depository and this will be clearly highlighted in any assessment.

## Benefits of the Depository Service

The scale and global reach of the Service should provide significant benefits to the securities industry, including:

- Increasing global market understanding.
- Providing much needed information on protection of assets, risk minimisation, and service quality to custodian banks, brokers, asset managers, and investors.
- Encouraging cross-border investment flows and thereby promoting increased market liquidity.
- Significantly reducing the number of requests for information on CSDs by providing a global central point of validated data and point of assessment for these institutions.
- Providing a mechanism to publicise infrastructural improvements as they take place.
- Supporting end investors' market risk evaluations integral to decisions to invest outside their home markets. This has become a regulatory imperative in the U.S. and many regulatory environments appear to be following this lead.
- Demonstrating via publication of assessment reports those areas where the depository is strong and also identifying weaknesses that could use improvement. In this context the reports will also assist depositories who can use the results to focus efforts to improve specific levels of services available to participants and customers.

## Risk Assessment

In general, the role of any CSD in the financial market and economy of a country requires them to exhibit a low-risk profile. The owners and management of CSDs typically operate them like quasi-public utilities rather than as profit-making businesses. The participants exert pressure on these entities to ensure that they are structured to operate in a prudent manner. To varying degrees, CSDs build internal safeguard mechanisms to allow them to withstand occasional market adversity. Against this background, the institutions involved in the Depository Service defined the categories of risks to be covered and the evaluation criteria to be used in the assessment.

The categories include six specific risk areas associated with a Depository's involvement with local market transaction processing and safekeeping. The main risk areas, described in more detail in Supplement 1, are:

**Asset commitment risk** - the risk associated with the period of time from which use of securities or cash is lost (control given up) before receipt of countervalue.

**Liquidity risk** - the risk that insufficient securities and or funds are available to meet commitments; obligation will be covered sometime later.

**Counterparty risk** – the risk that a counterparty (i.e., an entity) will fail to settle its obligations for full value at any time, and the risk that such a failure will trigger a chain reaction.

**Financial risk** - risk associated with the ability of the CSD to operate as an on-going concern.

**Operational risk** – the risk that deficiencies in information systems or internal controls, human errors or management failures will result in unexpected losses.

**CSD on CSD credit risk** - when a CSD links with a peer group CSD, the credit risks that host and inward CSDs are taking.

The risks identified by the Depository Service clearly offer a different perspective and exclude many of the common risk categories/terminology used by investors when considering investing in a particular country.

- In this regard, sovereign risk is excluded from the assessments as it is covered by the rating agencies, while systemic risk is covered under counterparty risk.
- Legal risk is also considered to be outside the scope of the Depository Service. Notwithstanding this, as part of the data collection exercise the Service will request information supporting a number of legal issues directly from the CSDs (e.g., copies of depository agreements, details of the law(s) and regulations that established the CSD, when is a security transfer binding, how are disputes settled, what rights does the CSD have over assets it is holding, etc.).

When undertaking assessments, these will be carried out at a given point in time. The assessment will not take into consideration any future enhancements or developments, however close to implementation. Ongoing reporting of material changes, market by market, will follow the initial analysis.

### **Regulatory Oversight**

Because of their central role in the financial markets, CSDs are subject to local regulatory scrutiny. The Depository Service looks favourably on the role of the regulators to the extent they provide a backstop by setting and or approving minimum financial and operating standards and rules of conduct for the CSD(s). Regulators occasionally audit these institutions for enforcement of their own rules and discipline violators. The regulators also police market participants to ensure that they adhere to the rule and regulations controlling the marketplace or otherwise putting the CSD at undue risk. The Depository Service does not in any way attempt to cut across the activities of the regulators. Indeed we envisage our work being of assistance to the local market regulator(s) as the scope of the assessments goes beyond the Depository to look at settlement and custody risk exposures linked to equity and fixed income transaction processing.

### **Embedded checks and balances to support the assessments**

It is the commitment of the Depository Service to make the Service and the criteria for assessments as transparent as possible. Significant effort and discussion has taken place across the industry to ensure that appropriate levels of checks and balances have been put in place to provide comfort to all those involved in the Service, either as a CSD being assessed or as a participant taking any element of the Service outputs. These checks and balances are outlined in more detail below (see “Data Collection Process”). This allows each CSD the opportunity to review and confirm the base data Workbooks, completed and validated by the support banks to the Service and comment on the draft reports produced before they are finalised and published.

## **Data Collection Process**

As indicated, the scope of the Service and the risk analysis includes settlement and custody risks linked to equity and fixed income transaction processes in local markets, particularly as they impact Depositories. Hence, the data required goes beyond Depository specific data. The collection and verification of the base information is, therefore, a mix of the support banks and the Depositories. The Service has adopted the following approach:

**Step 1 – Initial Data collection** - The Workbook is split into three sections:

- A) General Profile** – These questions will be sent directly to each Depository, populated with information previously supplied by the CSD to Thomas Murray.
- B) Risk component** – The initial collection of this information will be undertaken by support banks, which typically have a local branch in each market (“Primary Support Banks”). Depending on the market concerned the Primary Support Bank may make direct contact with each local depository(ies).
- C) Operational component** - These questions relate to the CSD’s operational rules, procedures and operating guidelines and like Part A above, will be sent directly to each Depository in the first instance for completion.

**Step 2 – Data Verification** - Once the component parts of the Workbook have been returned to Thomas Murray they will be blended into one document and sent to the relevant Primary Support Bank and second support bank (“Secondary Support Bank”), who, using a combination of their internal knowledge and/or local sub-custodians, will verify and augment the Workbook as necessary. Thomas Murray will work on exception resolution between the Primary and Secondary Support Banks and arbitrate, as necessary, where differences occur that cannot be resolved locally.

**Step 3 – Data Confirmation** - A copy of the data completed will be sent to each Depository for confirmation and sign off. Thomas Murray will arbitrate on any issue raised by a Depository, which is specifically relevant to their organisation. The Service will produce an analytical report on each Depository. Where a Depository is unable to provide information or the required support, Thomas Murray and S&P will necessarily have to place reliance on the Primary and Secondary Support Banks completing the Workbook as far as possible and the output report may be qualified accordingly.

**Step 4 – Report Generation** - Thomas Murray and S&P will prepare and publish an assessment on each Depository. It is important to note that these are written assessments; they are not ratings and will be largely qualitative reports. The reports will be stand-alone, written from a local market perspective and not comparable across markets. The reports will bear in mind local conditions outside the control of the depository.

The reports will be structured to provide information to assist all users in meeting commercial standards including those, which relate to asset safety, risk minimisation and service quality. The risk analyses will include risks associated with local market securities transaction processing as they impact Depositories.

## **Timings**

U.S. mutual funds subject to Rule 17f-7 have a need to better understand risks associated with maintaining assets at Depositories and are putting considerable pressure on their Custodians and asset managers for support in this regard. Custodians are required under the new Rule to supply their clients and/or their investment managers with analyses of Depositories pertaining to custody risks. Time to market for this Depository Service therefore is of the essence to support these groups. In this regard, the Service is seeking to evaluate all operational equity and fixed income Depositories in the first year. The initial data gathering exercise commenced in November 2000 and the first assessments will be available from the end of Quarter 1, 2001.

The Depository Service is non-exclusive and therefore available to all institutional and wholesale participants. Drawing on raw data that is publicly available, the Service will have, as its main output for institutional participants, summary assessment reports produced on each individual CSD based on Thomas Murray/S&P risk analysis. More detailed reports on each Depository assessed and the related risks, and access to a web-based electronic Depository Database, maintained by Thomas Murray is available to wholesale participants and other interested groups.

Through the work undertaken by the Depository Service, the Depository Service is pleased to consider requests from third party associations, or other groups, for co-operation. This includes the CSDs themselves who may agree to cross-share information directly via the Service.

## **Supplement 1:        Definition of Risks**

### **Asset Commitment Risk**

Definition: the period of time from which use of securities or cash is lost (control given up) before irrevocable receipt of countervalue.

General: It focuses on concerns regarding the asset commitment periods, that is the amount of time participant assets, either cash or stock, are frozen within the CSD pending settlement of the underlying transaction(s) and the irrevocable receipt of value. Following initial settlement the risk period is extended until the transfer of funds and stock becomes irrevocable. It excludes any periods when assets, cash or stock, are committed to a market participant including brokers, banks and custodians, not caused by CSD processing.

It is the period of exposure direct participants and their clients have to the settlement cycle.

### **Counterparty Risk**

Definition: The risk that a counterparty (i.e. an entity) will not settle its obligations for full value at any time.

General: This is simply the total default of a direct participant of the CSD or market utility including the CSD. This is the event when a participant is unable to meet its financial liability to the CSD and possibly other creditors. Counterparty risk depends on who the other participants are and examines the effectiveness of the monitoring of those participants. Effective counterparty monitoring should cause the CSD to withdraw services to a participant who fails to meet a financial liability to another organisation, not directly connected to the CSD. Areas of investigation will include: participant criteria, participant concentration.

When the counterparty is the CSD or an associated clearinghouse a default would require the liquidation of the organisation concerned and the settlement of all outstanding trades will be called into question.

This risk only goes as far as direct participants of the CSD and excludes clients of direct participants that default on liabilities to such participants, even if such a default should systemically cause the direct participant to subsequently default.

### **CSD on CSD Credit Risk**

Definition: The credit risk that a CSD is taking when linking to a peer group CSD i.e., the risks a CSD is taking in either providing a service for another CSD or using another CSD as a local service provider (host CSD).

General: Today this is a relatively uncommon risk but given market developments this risk will gain in potential importance.

## **Financial Risk**

Definition: The ability of the CSD to operate as a financially viable company.

General: This risk is concerns the financial strength of the depository and if its capital is sufficient to meet the on-going operation of the organisation and its revenues, cash flow and ongoing profitability.

Aspects of the Financial Risk assessment include the capital structure and financial aspects of the CSD, its ownership, its dividend and rebate policies, funding aspects including its ability to raise additional capital. The assessments will consider the diversity of products and examine volumes of each over a five-year period to determine if there are any concentration issues. The ownership of a CSD can take many different forms, which may have assessment implications. This assessment is interested in the financial resources and the incentives of the owners and participants to support the CSD in times of need.

Where the CSD acts as a counterparty risk exposure arising from its role as a principal will be blended with Financial Risk.

## **Liquidity Risk**

Definition: The risk that insufficient securities and/or funds are available to meet commitments; the obligation will be met sometime later.

General: This is where for certain technical reasons (e.g., Stock out on loan; stock in course of registration, turn round of recently deposited stock is not possible) one or both parties to the trade have a shortfall in the amount of funds (credit line) or unencumbered stock available to meet settlement obligations when due. These shortfalls may lead to settlement “fails” but do not normally lead to a default.

Aspects of a CSD to be looked at under this risk include the settlement processing cycle, the availability of credit and stock lending facilities.

## **Operational Risk**

Definition: The risk that deficiencies in information systems or internal controls, human errors or management failures will result in unexpected losses.

General: The risk of loss due to breakdowns or weaknesses in internal controls and procedures. Internal factors to be considered in the assessment include ensuring the CSD has formalised procedures established for its main services. The CSD should have identified control objectives and related key controls to ensure operation and proper control of established procedures. Systems and procedures should be tested periodically. There should be external audit processes in place to provide third party audit evidence of the adequacy of the controls.